

## CLAIMS

1. An announcement method for use in a publish-subscribe architecture, the method comprising: compiling an index message containing a plurality of sequence  
5 identifiers respectively identifying a plurality of sequences of messages, each message in each sequence relating to substantially the same subject matter; and transmitting the compiled index message onto an index channel; the method being characterised in that the sequence identifiers comprise at least two sub-parts, and the compiling step further comprises, for any sequence identifier to be included within the index message, including  
10 within the index message only those sub-parts of a sequence identifier which are necessary to uniquely identify the sequence identifier from the other sequence identifiers included within the message.
2. A method according to claim 1, and further comprising the step of requesting the  
15 allocation of a sequence identifier from an allocator; and receiving a message from the allocator containing the requested sequence identifier.
3. A method of allocating a sequence identifier to a sequence of messages relating to substantially the same subject matter and which are to be transmit onto one or more  
20 communications channels, the method comprising:  
generating a first sub-part of a sequence identifier part, the first sub-part being semantically meaningless when considered alone;  
combining the generated first sub-part of the identifier with a second, meaningful, sequence identifier sub-part to provide the sequence identifier; and  
25 allocating the sequence identifier to the sequence of messages;  
wherein the first sequence identifier sub-part is generated such that when combined with the second sequence identifier sub-part the resulting sequence identifier is unique at least at that time.
- 30 4. A method according to claims 1, 2, or 3 wherein a first sub-part of a sequence identifier is a network address or other network locator.
5. A method according to claim 4, wherein the first sub-part is a Universal Resource Locator (URL).

6. A method according to claim 4, wherein the first sub-part is an email address.
7. A method according to claim 4, wherein the first sub-part is an Internet Protocol network address.
- 5 8. A method according to any of the preceding claims, wherein a second sub-part of a sequence identifier is a number.
9. A method according to claim 8, wherein the number is randomly generated.
- 10 10. A method according to claim 8, wherein the number is produced by applying a hash function to data defining the subject matter of the sequence of messages.
11. A method according to any of claims 3 to 10, and further comprising generating  
15 the meaningful part of the sequence identifier, if required.
12. A method according to any of claims 3 to 11, and further comprising checking if the generated meaningless sub-part of the sequence identifier has been previously generated, and if so generating another meaningless sequence identifier sub-part;  
20 wherein the checking and generating steps are repeated until a meaningless sequence identifier sub-part is obtained which has not been previously generated.
13. A method according to any of claims 3 to 12, and further comprising the step of receiving a request for a sequence identifier, the allocating step then further comprising  
25 transmitting the subsequently obtained sequence identifier to the party or element from which the request was received.
14. An announcement method for use in a publish-subscribe architecture, the method comprising: transmitting a sequence of messages relating to substantially the  
30 same subject matter on to one or more communications channels, each message in the sequence including at least part of a sequence identifier, the method being characterised in that the sequence identifier is allocated to the sequence in accordance with any of claims 3 to 13.

15. An announcement method for use in a publish-subscribe architecture, the method comprising transmitting an index message onto an index channel, the index message containing one or more sequence identifiers respectively identifying one or more sequences of messages, each message in each sequence relating to substantially the same subject matter, the method being characterised in that the sequence identifiers are respectively allocated to the sequences of messages in accordance with any of claims 3 to 13.

16. A computer program or suite of computer programs arranged such that when executed on a computer system it or they cause the computer system to operate in accordance with the method of any of the preceding claims.

17. A computer readable storage medium storing the computer program or at least one of the suite of computer programs according to claim 16.

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18. An announcement system for use in a publish-subscribe architecture, the system comprising: message compiling means arranged in use to compile an index message containing a plurality of sequence identifiers respectively identifying a plurality of sequences of messages, each message in each sequence relating to substantially the same subject matter; and means for transmitting the compiled index message onto an index channel; the system being characterised in that the sequence identifiers comprise at least two sub-parts, and the message compiling means is further arranged to operate, for any sequence identifier to be included within the index message, to include within the index message only those sub-parts of a sequence identifier which are necessary to uniquely identify the sequence identifier from the other sequence identifiers included within the message.

19. A system according to claim 18, and further comprising means for requesting the allocation of a sequence identifier from an allocator; and means for receiving a message from the allocator containing the requested sequence identifier.

20. An apparatus for allocating a sequence identifier to a sequence of messages relating to substantially the same subject matter and which are to be transmit onto one or more communications channels, the apparatus comprising:

identifier part generation means for generating a first, meaningless, sequence identifier sub-part;

sequence identifier generation means arranged to combine the generated meaningless identifier part with a second, meaningful, sequence identifier sub-part to  
5 provide the sequence identifier; and

sequence identifier allocating means for allocating the sequence identifier to the sequence of messages;

wherein the first sequence identifier sub-part is generated such that when combined with the second sequence identifier sub-part the resulting sequence identifier is unique at  
10 least at that time.

21. A system according any of claims 18 to 20, wherein a first sub-part of a sequence identifier is a network address or other network locator.

15 22. A system according to claim 21, wherein the first sub-part is a Universal Resource Locator (URL).

23. A system according to claim 21, wherein the first sub-part is an email address.

20 24. A system according to claim 21, wherein the first sub-part is an Internet Protocol network address.

25. A system according to any of claims 18 to 24, wherein a second sub-part of a sequence identifier is a number.

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26. A system according to claim 25, wherein the number is randomly generated.

27. A system according to claim 25, wherein the number is produced by applying a hash function to data defining the subject matter of the sequence of messages.

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28. An apparatus according to any of claims 20 to 27, and further comprising means for generating the meaningful part of the sequence identifier, if required.

29. An apparatus according to any of claims 20 to 28, and further comprising  
35 checking means for checking if the generated meaningless part of the sequence identifier

has been previously generated; the identifier part generation means being further operable to generate another meaningless sequence identifier part if the checking means indicates that the generated meaningless part of the sequence identifier has been previously generated; wherein the checking means and the identifier part generation  
5 means repeat their respective operations until a meaningless sequence identifier part is obtained which has not been previously generated.

30. An apparatus according to any of claims 18 to 29, and further comprising the step of means for receiving a request for a sequence identifier; and the sequence  
10 identifier allocating means further comprising means for transmitting the subsequently obtained sequence identifier to the party or element from which the request was received.

31. An announcement system for use in a publish-subscribe architecture, the system comprising: message transmission means for transmitting a sequence of messages  
15 relating to substantially the same subject matter on to one or more communications channels, said means being operable to include in each message at least part of a sequence identifier, the system being characterised in that the sequence identifier having been allocated to the sequence by an apparatus according to any of claims 18 to 30.

20 32. An announcement system for use in a publish-subscribe architecture, the system comprising: message transmission means for transmitting an index message onto an index channel, the index message containing one or more sequence identifiers respectively identifying one or more sequences of messages, each message in each  
25 sequence relating to substantially the same subject matter, the system being characterised in that the sequence identifiers are respectively allocated to the sequences of messages by an apparatus according to any of claims 18 to 30.

33. An announcement system according to claims 31 or 32, and further comprising means for requesting the allocation of a sequence identifier from an apparatus according  
30 to any of claims 18 to 30.